73

Serial No. 06/178,107

97. The inverter of Claim 96 including means for adjusting the inductive element of said LC series circuit to adjust the light output of said gas discharge lamp when connected thereto as the load.

D4

101. The inverter of Claim 100 including means for releasably connecting [wherein said load also includes] a gas discharge
lamp with said pair of output terminals as said load.

D5

104. In a <u>fluorescent lamp ballast</u> having two output terminals for connection with two input terminals of a fluorescent lamp, said ballast providing suitable starting and operating voltages for [said] <u>a</u> fluorescent lamp and said input terminals having a capacitor connected in circuit therewith, the improvement comprising:

means for releasably connecting [said] \underline{a} fluorescent lamp in circuit and said two output terminals; and

means for preventing said starting and operating voltages from appearing across said output terminals except when the fluorescent lamp is connected therewith, thereby rendering the output terminals substantially free from electric shock hazard whenever the fluorescent lamp is disconnected.

7)6

106. A half bridge inverter circuit for providing a substantially squarewave output voltage from a source of DC voltage, said source having output terminals across which said DC voltage is produced, comprising:

two transistors connected in series across two of said output terminals;

means for interconnecting the two transistors at a point;
a series-combination of an inductor and capacitor

connected between said point and one of the output terminals of
said DC voltage source, the natural resonant frequency of said
series-combination being lower than the lowest frequency component
of said squarewave output voltage; [and]

/serial No. 06/178,107

D'andld

a load; and

means for connecting the [a] load [connected] in parallel cirpoit with said capacitor to receive a voltage thereacross which is transformed in amplitude and waveshape compared with the voltage present between said point and one of the terminals of said source of DC voltage.

D7

108. The half bridge inverter circuit of Claim 107 wherein the load connecting means includes means for connecting [comprises] a gas discharge lamp in parallel circuit with said capacitor.

7)

110. In a ballasting circuit for a gas discharge lamp having an inverter for receipt of power for a source of DC voltage to provide a substantially squarewave voltage output across a pair of terminals, the improvement comprising:

means including an inductor for connecting [said] a gas discharge lamp in circuit with said pair of output terminals, said inductor limiting the current supplied to the lamp when connected therewith; and

means including a capacitor <u>connectable</u> [connected] in parallel with said lamp <u>when connected in circuit with said pair</u> of output terminals for improving the power factor by which power is drawn from said pair of output terminals.

D9

112. In an inverter circuit having two transistors connected in parallel, push-pull configuration and each having a collector for providing a substantially squarewave voltage between said collectors, the improvement comprising:

a series-combination of an inductor and a capacitor connected directly between the two collectors, the natural series resonant frequency of said series-combination being substantially equal to or lower than the lowest frequency component present in said squarewave voltage; [and]

Serial No. 06/178,107

a load; and

[a] means for connecting the load [connected] in parallel circuit with said capacitor [which causes] to cause the voltage thereacross to be transformed in amplitude and [waveshap] waveshape relative to the voltage present between the two collectors to provide improved power factor loading for the inverter, [and to have a reduced] said capacitor reducing the amount of higher frequency components relative to the voltage present between the two collectors.

- 114. The inverter circuit of Claim 112 in which the load connecting means comprises means for connection [is] a gas discharge lamp in parallel circuit with said compacitor.
- an inverter for providing a substantially squarewave AC voltage output across two output terminals, comprising:

an inductor and a capacitor connected in series across said two output terminals, said inductor and capacitor in combination having a natural resonant frequency that is lower than the fundamental frequency component of said squarewave AC voltage; and

means for connecting [the] a fluorescent lamp in parallel circuit with said capacitor, said squarewave AC voltage being transformed thereby in waveshape and amplitude to provide a substantially sinusoidal voltage of appropriate magnitude to start and operate the lamp when connected in parallel circuit with the capacitor.